

APPENDIX B

COMPARISON OF CLAIM 271 OF THE PRESENT APPLICATION
WITH CLAIM 15 OF U.S. PATENT NO. 6,080,576

Claim 271

A method to activate expression of an endogenous gene in an isolated eukaryotic cell comprising

introducing a vector construct into said isolated eukaryotic cell,

said vector construct comprising in operable combination

1) a promoter;

2) an exon sequence located 3' from and expressed by said promoter

said exon being derived from a naturally occurring eukaryotic gene

and not being a screenable marker gene; and

3) a splice donor sequence defining the 3' region of said exon

said splice donor sequence being derived from a naturally-occurring eukaryotic gene;

wherein said vector construct is non-homologously incorporated into the genome of a said isolated eukaryotic cell

and said splice donor sequence of the transcript encoded by said exon is spliced to a splice acceptor sequence of said endogenous gene.

Claim 15 of the Zambrowicz Patent

A method to alter expression of a gene in an isolated eukaryotic cell comprising

introducing a 3' gene trap cassette vector into said cell,

said 3' gene trap cassette vector comprising in operable combination

1) a promoter;

2) an exon sequence located 3' from and expressed by said promoter

said exon being derived from a naturally-occurring eukaryotic gene

said exon not encoding an activity conferring antibiotic resistance

and said exon not being a reporter gene; and

3) a splice donor sequence defining the 3' region of said exon

said splice donor sequence being derived from a naturally occurring eukaryotic gene;

wherein said cassette is non-homologously incorporated into the genome of an eukaryotic target cell

and said splice donor sequence of the transcript encoded by said exon is spliced to a splice acceptor sequence of said cellularly encoded gene.